Lesson Two Detailed Lesson Plan: (Approx 45 min to complete)

1) Instructor establishes daily procedure for assessment, note taking, instruction, and learning. Students and instructor have materials ready.
2) Instructor launches PowerPoint Presentation. Entire lesson can and should be conducted with instructor interacting with the class and the PowerPoint presentation eliciting responses from students and guiding them as the lesson progresses.

   a. Slides 1-2: Introduction and review. Instructor reviews concepts from Lesson 1, engaging class in the process. Delivery of review remains at instructor's discretion: students write down responses and/or students reply aloud. Instructor informs class that Lesson 2 will focus on human impacts on climate and how scientists study weather and climate change.

   b. Slides 3-4: What is Climate Change? Students should take notes on climate change from these slides. Note format (T-chart; Cornell Notes; etc) at instruction's discretion. Copying everything off all slides is not necessary. Instructor poses key question and engages class in discussion.

   c. Slides 4-7: What human activities contribute to climate change? Instructor poses question to class and elicits responses verbally or in writing, encouraging educated guesses, hypotheses, and more. Students take notes on human activities that contribute to climate change.

   d. Slides 8-19: How does the greenhouse Effect work? The greenhouse effect is a complex concept at any level and extra time should be planned to explain this concept to students. Based on the individual class, instructors can supplement the PowerPoint slides with their own illustrations or drawings on the whiteboard. On slide 14, instructors can ask a question that segues to the next slide: "What can impact the greenhouse effect?" This will anticipate slide 15. Note the subtle graphical differences between slides 15 and 16, and be sure to frequently check for understanding among students.

   e. Slide 20: Climate change beyond just warmer temperatures. Before reaching this slide, ask students: "what else might climate change impact?"

   f. Slide 21: Baldwin Hills Scenic Overlook contributes to sustainability. Explain how the Baldwin Hills Scenic Overlook and other similar parks and greenspaces contribute to sustainability. Remind students how park visitors can view weather from this state park.

   g. Slides 22-25: Data, meteorology, hypothesis, and tools for weather observation and measurement. These slides are definition-rich. Be sure to remind students to take notes, explain what these concepts mean, and how

you want them to take notes.

h. Slide 26: Lesson 1 data & hypothesis. Using information from Lesson 1 explain what a hypothesis is. The hypothesis that Santa Susanna State Historic Park will be the hottest of the three parks will return later in the Lesson 2 presentation.

i. Slides 27-30: Data collection and hypothesis. Review how data collected can support or not support a hypothesis. In the case of these slides, the hypothesis posited in slide 26 is supported

j. Slides 31-34: Lesson 2: Activity – Part A: Predicting Climate Change Effects on California State Parks. Pass out Lesson 2: ACTIVITY. Slides 32 through 34 correspond directly with Questions 1-3 in Part A. Instructors should scaffold a hypothesis with the entire class for question 1 and then encourage students to individually devise their own hypotheses for questions 2 & 3.

k. Slides 35-47: Lesson 2: Activity – Part B: Measuring Weather at Baldwin Hills Scenic Overlook State Park. Slides 35-47 introduce tools meteorologists use for measuring weather and collecting data, with an emphasis on the units of measure. Following along with instructors students should complete the chart in Part B in the activity sheet.

l. Slides 48-49. Review information covered with the class during Lesson 2.

3) Collect materials and notes per instructor and class policy.
4) Students collect Word Search and Crossword Puzzle Activities as they exit for homework and independent practice or study.